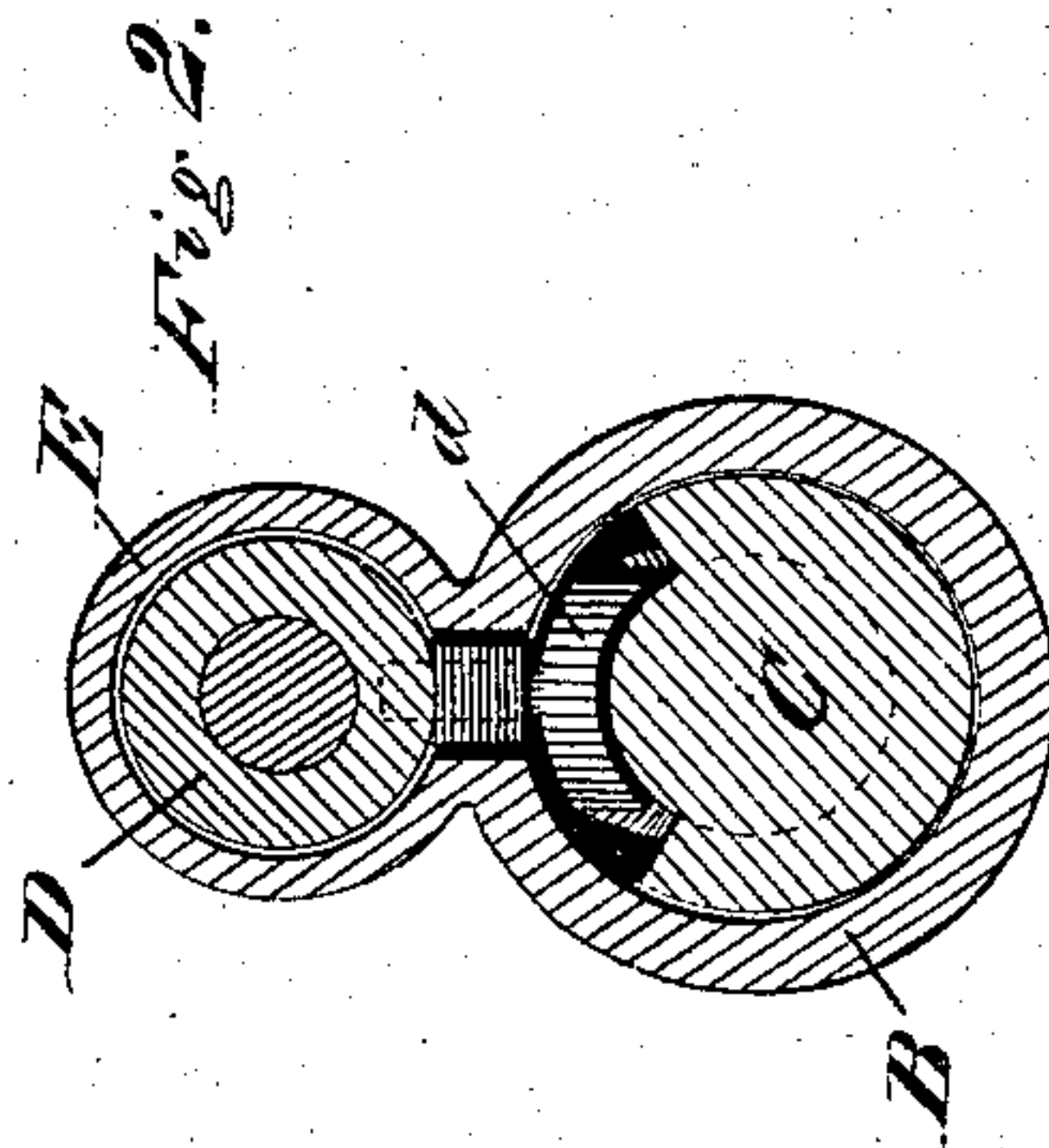
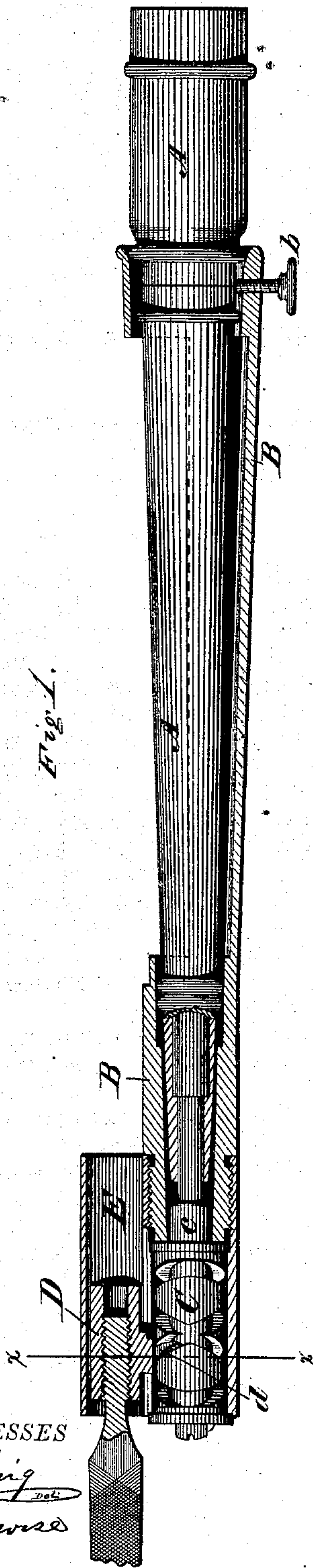


J. W. GILBERT.

Hand-Pieces of Dental-Engines.

No. 158,932.

Patented Jan. 19, 1875.



WITNESSES

Harry King
B. H. Morse

John W. Gilbert

INVENTOR

By his Attorney

Wm. D. Baldwin

UNITED STATES PATENT OFFICE.

JOHN W. GILBERT, OF PHILADELPHIA, PENNSYLVANIA, ASSIGNOR TO
SAMUEL S. WHITE, OF SAME PLACE.

IMPROVEMENT IN HAND-PIECES OF DENTAL ENGINES.

Specification forming part of Letters Patent No. **158,932**, dated January 19, 1875; application filed
December 22, 1874.

CASE D.

To all whom it may concern:

Be it known that I, JOHN W. GILBERT, of the city and county of Philadelphia, in the State of Pennsylvania, have invented an Improved Tool-Holder Attachment for the Hand-Pieces of Dental Engines, of which the following is a specification:

The object of my invention is to convert the ordinary rotatory movement of a chuck or tool-holder of a dental engine into a reciprocating movement to actuate a saw, file, or other implement. This object I attain by mounting the tool in a socket or holder reciprocating in guides in a frame-piece or attachment, capable of being fastened on a hand-piece of a dental engine, and carrying a cam or screw to actuate the tool, the shank of the cam being adapted for insertion in the tool-holder of the hand-piece, by which mode of construction the attachment may readily be removed or replaced.

In the accompanying drawings, which show my improvement as embodied in the best way now known to me, Figure 1 represents a view, partly in section, of the hand-piece of a dental engine with my improved attachment thereon, and Fig. 2 a transverse section there-through.

A hand-piece, A, has a chuck or tool-holder of the usual well-known construction mounted therein. A tubular frame-piece, B, is made to fit snugly on the hand-piece, and is held securely thereon by means of a thumb-screw, b, or any equivalent well-known locking devices. A shaft, c, turns in suitable bearings in this frame, its rear end being adapted for

insertion in the chuck or tool-holder of the hand-piece. A cam, C, or double traversing-screw of well-known form, imparts a reciprocating motion to a tool-holder, D, which reciprocates in a tubular guide, E. A swiveling-lug, d, pivoted on the tool-holder, runs in the groove of the traversing-screw and actuates the holder in a well-known way.

Other well-known equivalent devices may be substituted for those hereinbefore described.

The file or saw may be secured in the holder in any of the usual well-known ways.

It is obvious that by my improvement this attachment may readily be removed or replaced upon the hand-piece, and the dental engine adapted to a greater variety of work.

I claim—

1. A tool-holder attachment for hand-pieces of dental engines, substantially as hereinbefore set forth, consisting of the combination of a frame-piece adapted for attachment to the hand-piece, and having a driving-shaft and tool-holder mounted therein.

2. The combination, substantially as hereinbefore set forth, of a hand-piece, a chuck revolving therein, a detachable frame, a tool-holder mounted therein, and a driving-shaft adapted for insertion in the chuck of the hand-piece and actuating the tool-holder.

In testimony whereof I have hereunto subscribed my name.

JOHN W. GILBERT.

Witnesses:

J. A. B. WILLIAMS,
FRANK L. HISE.